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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,500	03/13/2001	Arun Ayyagari	207199	1953

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EXAMINER

CHO, HONG SOL

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/805,500	Applicant(s) AYYAGARI ET AL.	
	Examiner Hong Cho	Art Unit 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7-10,13,15-19,21 and 25-27 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,11,12,14,20,22-24 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03-13-2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Note: Some of Non Patent Literatures are not considered for the examination because they are not available.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 15-17, 26, and 27 are rejected under 35 U.S.C. 102(e) as being unpatentable over Okanoué et al (U.S 6282577), hereinafter referred to as Okanoué.

Re claims 15 and 26, Okanoué discloses detecting wireless networks for a mobile terminal to be connected (*scanning to determine a presence of wireless networks and other wireless stations*, column 1, lines 9-18) and making a connection to the wireless infrastructure network (*attempting to connect with the wireless networks in an infrastructure mode*, column 6, lines 16-18) and to an ad hoc wireless network (*attempting to connect with the wireless networks in an ad hoc mode*, column 6, lines 19-22).

Re claims 16 and 17, Okanoué discloses a mobile terminal not performing a connection to any network when there is no network to be connected to (*operating in an off-line mode when a mobile terminal is unable to connect to any wireless networks in an*

infrastructure and an ad hoc mode, figure 4, element S14) and performing a connection to a new ad hoc network (connecting to the newly detected network form off-line mode, column 5, lines 65-67; column 6, lines 3-6).

Re claim 27, Okanoué discloses a wireless terminal for determining available network connectivity interfaces (figure 4, element S11), selecting a preferred network connectivity interface (figure 4, element S12), selecting a preferred network connectivity from the communicated available network connections (column 5, lines 61-64), and establishing network connectivity with the preferred network connection (figure 4, element S17).

It is inherent that Okanoué's system is equipped with some levels of system interconnection layers such as interface specific configuration layer to communicate with each layer for the purpose of transferring network information.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 5, 7-10, 13, 18, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okanoué in view of Guilford et al, hereinafter referred to as Guilford.

Re claims 1, 13, and 25, Okanoué discloses detecting wired and wireless networks for a mobile terminal to be connected (*scanning for network presence*, column 1, lines 9-18; column 2, lines 4-6) such as an Ethernet (*wired network*), trunk network (*wireless infrastructure*, figure 3, element 11), and ad hoc network (*wireless ad hoc modes*, figure 3, element 12). Okanoué fails to disclose explicitly connecting to a network based on the user preferences. However, Guilford discloses an intelligent network selection method based on QoS in a roaming table (*user preference with a connection policy file*, figure 4) over wireless networks (paragraph 0002, lines 1-4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the concept of Guilford in selecting the preferred wireless network type based on user preferences into Okanoué's system for improved network performance or cost benefits by directing wireless communications to the appropriate network (paragraph 0008, lines 7-9).

Re claims 2, 5, and 7, Guilford discloses checking user connection to the home service provider (*checking for a default mode setting*, figure 8a, elements 150, 152, and 154), checking for a preferred list of network providers (figure 7b, element 106) and registering new chosen service provider for the optimal service (*checking for a preferred list of network providers*, figure 7b, element 108; paragraph 0084, lines 1-10). Guilford and Okanoué fail to teach checking an authentication mode setting at the wireless terminal and connecting to a network with steps addressed in IEEE 802.11 and 802.1X wireless standard. However, the process for verifying the user's authentication and granting a service request to the mobile user through wireless IEEE 802.11 and 802.1X standards is

well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement IEEE 802.11 and 802.1X standards into Guilford and Okanoué that will meet the requirements of compatibility to the wireless standards.

Re claim 8, Okanoué discloses the procedure for forming ad hoc network when there is no network to which the mobile terminal is to be connected (*when the mobile terminal fails to connect to a network, the mobile terminal selects to connect to an ad hoc mode*, column 5, lines 65-67).

Re claims 9 and 10, Okanoué discloses performing ad hoc network identifier setting procedure to form the ad hoc network from a plurality of ad hoc networks (*selecting default ad hoc mode SSID*, column 6, lines 3-6; column 8, lines 44-48). Okanoué fails to explicitly disclose attempting an IEEE 802.11 association with the selected SSID.

However, using 802.11 standard in wireless network connection is well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an IEEE 802.11 standard in creating ad hoc network for the purpose of meeting the wireless industry standard.

Re claim 18, Okanoué fails to disclose explicitly connecting to a network based on the user preferences. However, Guilford discloses a list of preferred network providers based on user preference (*detecting compatible and preferred wireless networks based on user preferences*, paragraph 0060, lines 1-5) and making a network connection to the preferred network (*attempting to connect with the preferred wireless network*, paragraph 0063, lines 1-3).

Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okanoué.

Re claims 19 and 21, Guilford fails to teach checking an authentication mode setting at the wireless terminal and connecting to a network with steps addressed in IEEE 802.11 and 802.1X wireless standard. However, the process for verifying the user's authentication and granting a service request to the mobile user through wireless IEEE 802.11 and 802.1X standards is well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement IEEE 802.11 and 802.1X standards into Guilford that will meet the requirements of compatibility to the wireless standards.

Allowable Subject Matter

5. Claims 3, 4, 6, 11, 12, 14, 20, and 22-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - US Patent (6134587) to Okanoué discloses method of setting up ad hoc LAN

- US Patent (6343220) to Van Der Salm discloses multimode telecommunication terminal device
- US Patent (6711146) to Yegoshin discloses telecommunication system for automatically locating network connection and selectively delivering callsto mobile client devices


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087.

The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3088.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hong Cho
Patent Examiner
9-29-2004


RICKY NGO
PRIMARY EXAMINER
9/30/04